

REMARKS/ARGUMENTS

The drawings, specification, and claims of this application have been corrected in response to the Examiner's objections thereto, and the claims have been amended in response to the rejections herein under 35 U.S.C. §112, second paragraph. Reconsideration of this application in view of these amendments and the following remarks is therefore respectfully requested.

Please note that the name and address of the Applicant's representative have changed. Kindly direct all future correspondence in this application to the Applicant's undersigned representative at:

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The Examiner's rejection of claims 1-5, 7 and 10-16 of the application under 35 U.S.C. §102 is based on a finding of full anticipation by Kondo et al. EP 736,503 (Kondo). That rejection is respectfully traversed for the following reasons.

In accordance with the invention, a wall flow filter comprising both a catalyst (with or without a surface-layer-increasing support washcoating) and a thin membrane of small pore size are applied to the filter. Further, in the filter of the invention, the thin membrane of small pore size is applied only to the gas outlet side of the filter, in order to insure high particle removal efficiency without unduly increasing the resistance of the filter to exhaust gas flow.

Kondo discloses only filters comprising catalysts supported by porous washcoats. No additional thin membranes of small pore size are provided. Further, the catalyst layers of Kondo are applied to both the gas inlet sides and gas outlet sides of the filters (Fig. 1). Accordingly the disclosure of Kondo is quite evidently absent any teaching or suggestion to employ a membrane in addition to the catalyst coating, or to apply such a membrane only on the gas outlet side of the filter.

On this basis it is respectfully submitted that Kondo fails to anticipate any of claims 1-5, 7, and 10-16 of the application, and therefore that the rejection of those claims under 35 U.S.C. §102 on reference to Kondo should be withdrawn.

The Examiner further rejected claim 6 of the application under 35 U.S.C. §103 as unpatentable over the combination of Kondo and Williamson et al., U.S. Patent No. 5,041,407 (Williamson). That rejection is also respectfully traversed, for the following reason.

The citation of Williamson was to show the use of substances such as alumina and barium in a catalyst washcoat. However, like Kondo, Williamson fails to disclose a wall flow filter comprising a catalyst coating in combination with a thin, small-pore membrane on the gas outlet side of the filter. If Williamson and Kondo together are therefore taken to suggest a catalyst washcoat with a stabilizing barium addition, the combined references still fails to suggest a catalyzed filter with an outlet side membrane in accordance the invention.

Finally, claims 8 and 9 of the application have been rejected under 35 U.S.C. §103 as unpatentable over Kondo taken with WO 98/09648 (WO '648). That rejection is also respectfully traversed, for the following reason.

The '648 disclosure was introduced to show wall flow filter bodies made from SiC particles within the size range of 75-170 μ m, sintered to form wall flow filters having a porosities of 50-90%. Given that teaching, however, the combination of Kondo and WO '648 still suggests at most a

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silicon carbide wall flow filter with a conventional catalyst washcoating. No teaching or suggestion to provide a catalyzed wall flow filter featuring a thin, small-pore membrane on the gas outlet side only of the filter is apparent. Accordingly, the subject matter of claims 8 and 9 of the application is clearly patentable over the combination of Kondo and WO '648.

In summary, all of claims 1-16 of this application are directed to an invention neither taught nor suggested by the art of record in this case, or any combination thereof. Therefore, the claims, specification and drawings in this case now being in full compliance with 35 U.S.C. §112, it is respectfully submitted that this case is now in condition for allowance, and such action is courteously solicited.

Applicants believe that a one (1) month extension of time is necessary to make this Reply timely, and request that the Office grant such time extension pursuant to 37 C.F.R. § 1.136(a) as is necessary to make this Reply timely. The Office is hereby authorized to charge the one (1) month extension fee or surcharge to the deposit account of Corning Incorporated, Deposit Account 03-3325.

Kindly direct all future correspondence in this case to the Applicant's undersigned representative.

Respectfully submitted,



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DATE: December 13, 2004

Amendment to the Drawings:

The attached sheet of drawings includes changes to Figs. 4-7, including those changes directed by the Examiner.

In Fig. 4, reference numeral 7 has been removed and reference number 16 redirected to the “catalytically active coating”. In Fig. 5, arrows 5 have been removed. In Fig. 6, reference numeral 3 has been corrected to reference number 6 referring to the boundary layer, and arrows 5 and 6 have been removed. In Fig. 7, arrows 3 have been removed.

Attachment: Replacement Sheet(s)